From: Gray, David

To: <u>Michael Honeycutt</u>; <u>Lefer, Barry L. (HQ-DK000)</u>

Subject: RE: More information about the proposed DC-8 flight over Southeastern TX for Thursday September 14th

Date: Monday, September 11, 2017 7:14:00 AM

Dr. Honeycutt, We have assurances from NASA leadership (see below) that this mission will not proceed until both EPA and TCEQ sign off. EPA has expressed concerns with the proposed NASA mission creating confusion regarding how this proposal overlaps with EPA/TCEQ sampling analytical results in the area.

David

From: Zurbuchen, Thomas H. (HQ-DA000) [mailto:thomas.h.zurbuchen@nasa.gov]

Sent: Saturday, September 09, 2017 10:57 AM

To: Gray, David <gray.david@epa.gov>; Kelly, Albert <kelly.albert@epa.gov>; Richard Hyde <richard.hyde@tceq.texas.gov>; Michael Honeycutt <Michael.honeycutt@tceq.texas.gov>; Rauscher, Jon <Rauscher.Jon@epa.gov>; Crossland, Ronnie <Crossland.Ronnie@epa.gov> **Cc:** Freilich, Michael H. (HQ-DK000) <mhf@nasa.gov>; Friedl, Lawrence A. (HQ-DK000) <Ifriedl@nasa.gov>

Subject: Re: Coordination Follow-up: NASA Houston DC-8 flight

Dear Dr. David Grey, and team – I have asked our NASA team to coordinate with you directly. However, Dr. Mike Freilich (Director, Earth Science) is traveling internationally. I also cc-ed Lawrence Friedl, who runs applied programs. Our NASA team will be sure to connect with you directly before any final decision on planning and execution of this mission is made.

Enjoy the weekend.

Best,

Thomas

From: Michael Honeycutt [mailto:Michael.Honeycutt@tceq.texas.gov]

Sent: Sunday, September 10, 2017 10:55 AM

To: Lefer, Barry L. (HQ-DK000) <barry.lefer@nasa.gov>

Cc: Gray, David <gray.david@epa.gov>

Subject: Re: More information about the proposed DC-8 flight over Southeastern TX for Thursday September 14th

Thanks, Barry. I will forward your email to the appropriate TCEQ staff.

Mike

On Sep 10, 2017, at 10:49 AM, Lefer, Barry L. (HQ-DK000) < barry.lefer@nasa.gov > wrote:

David and Michael,

I wanted to reach out to you to provide you with as much information that you need regarding the proposed NASA DC-8 flight over southeastern Texas scheduled for Thursday, September 14th.

The NASA Atmospheric Tomography mission is preparing for a Pole-to-Pole sampling of background atmospheric composition, and the first test flight is scheduled for Thursday, September 14th. The science team thought that it could be interesting scientifically to sample the atmosphere of southeastern Texas as the region is recovering from Hurricane Harvey. The instrument payload (see https://espo.nasa.gov/home/atom/instruments) is not optimized for urban sampling, rather, for the opposite). Nevertheless, it could provide an interesting snapshot of the current conditions.

Attached is additional information, including our flight track and flight plans. We would like to work with EPA and TCEQ to provide both of you with the most useful data possible for your missions. From the NASA point of view, I want to stress two points regarding this effort:

- **1. The design of this flight is regional in scope.** The overall goal is to assess the photochemical reactivity of the atmosphere and compare to the many earlier flights/campaigns in this region. The payload has superb capabilities for looking at the second stage products of photochemical pollution -- formaldehyde, peroxides, nitrates -- and the radical drivers (NOx, HOx). We can assess if large changes have followed the disaster. Small changes cannot be assessed this way.
- 2. The ATom DC-8 will not (firstly, because it is not able to) sample emissions from facilities in any effective way. All our VOC observations are time averaged (flasks; onboard GCs). Facility emissions are not the focus of the flight that we have planned. We should not in any way duplicate or interfere with Texas data collection or dissemination of information, as far as I can tell.

I will be available Sunday night, all-day Monday and all-day Tuesday. Please contact me

via email or phone and I would be happy to work with you to answer your questions and try to address any concerns.

Best regards. Sincerely, Barry

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